Technical University of Denmark

Project Agreement

Daniel Schougaard
s103446

November 24, 2015

Title (English)	Sharing Files Across Devices Using The Private Cloud
Title (Danish)	Fildeling På Tværs af Enheder Ved Brug af Den Private Sky
ECTS Points	32.5
Student Number	s103446
Start date	4/1-2016 *(dispensation has been given)*

1 Abstract of Project

Over the past few years, privacy on the internet has become a growing issue. As the cloud has become more and more popular for home users to use, so has it for hackers to attack. The recent LastPass security break [1] is a shining example of this.

One way to avoid this, which I know from personal experience is being used, is to use for instance KeePass, and store the `.kbdx` file in Dropbox. One downfall to this, is that you would have to rely on Dropbox to keep your – granted encrypted – password file safe.

In this project, the feasibility of running a private file synchronization and password manager service on a device consuming as little power as possible will be investigated. The end result, would be a service somewhat similar to that of Dropbox, while also syncing your passwords, but kept in the Private Cloud: None of the files ever leave your devices, and are kept *yours*.

The goal of the project is to implement a feature rich server-application, handling storage, synchronization, password encryption, off-site backup, public share links and all around primary logic of the system. The implementation of the system, for this project, will be separated into two sub-systems: The server and a client. The server will be developed running on a Unix system, due to affordability and availability of low-powered devices, running a Unix core. A client will also be developed. Due to its mainstream use, the client will be developed for Windows.

[1] https://blog.lastpass.com/2015/06/lastpass-security-notice.html/